



Mathematical Challenge Problems 2

MIDDLE DIVISION 2014–2015

PLEASE USE CAPITALS TO COMPLETE

SURNAME

OTHER NAME(S)
(underline the one
you prefer)

SCHOOL

AGE

YEAR OF STUDY

S

FOR OFFICIAL USE

Marker

Marks

1	2	3	4	5

Total

— — — — - C U T A L O N G H E R E — — — —

Please write your solutions on A4 paper and staple the above form to them.

PLEASE WRITE YOUR NAME ON EVERY PAGE.

Send your entry through your school to :

Tadahiro Oh

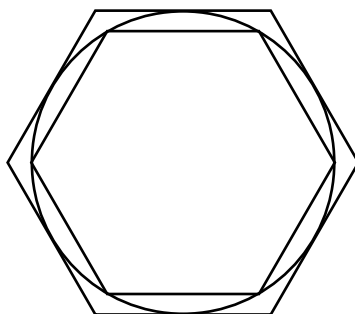
School of Mathematics, The University of Edinburgh

James Clerk Maxwell Building, The King's Buildings,

Mayfield Road, Edinburgh EH9 3JZ

For further information on the competition, please see the Information Circular, which has been distributed to all secondary schools. Please contact the local organiser, whose name and address are given above, if you require a further copy.

M5.



A regular hexagon circumscribes a circle which circumscribes another regular hexagon. The inner hexagon has an area of 3 square units. What is the area of the outer hexagon?

END OF PROBLEM SET 2

CLOSING DATE FOR RECEIPT OF SOLUTIONS :

13 February 2015

Look on the SMC web site:

www.scot-maths.co.uk

for information about Mathematical Challenge